



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Water Supply  
Zone II Determination for Existing Sources of Drinking Water

# **BRP WS 07** Approval to Conduct Pumping Test for Zone II Delineation **Instructions and Supporting Materials**

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## **Introduction**

MassDEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the MassDEP Web site at [www.mass.gov/dep](http://www.mass.gov/dep) in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

*Instructions & Support Materials* files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

*Permit Applications* in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



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## 1. What is the purpose of this approval?

The approval is to conduct a pumping test in order to delineate the Zone II for an existing well. Zone II is that area of an aquifer which contributes water to a well under the most severe pumping conditions that can be realistically anticipated (180 days of pumping at safe yield with no recharge from precipitation). Pumping tests must be conducted in accordance with *Guidelines and Policies for Public Water Systems*, available from the State House Bookstore.

The pumping test is conducted in order to evaluate the hydrogeologic characteristics of the aquifer. This is necessary to accurately delineate the Zone II. After the Zone II is delineated, the town or water supplier may wish to implement wellhead protection zoning and non-zoning controls to protect groundwater quality.

## 2. Who must apply?

A public water supply system must apply if it has been approved to pump 100,000 gallons per day or greater, but has not yet delineated the existing well's Zone II, and is required to pursue a Water Management Act Permit.

## 3. What other requirements should be considered when applying for this approval?

Prior to applying, applicants should consider how the data collected during the pumping tests will assist with generating the Zone II boundary. Please consult MassDEP staff prior to the pumping test concerning the data necessary for the delineation.

**Note:** Approvals of this type may require MEPA review. Please carefully examine 301 CMR 11.00, the MEPA Regulations, to determine if your project exceeds the MEPA review thresholds, or for more information contact the MEPA Unit of the Executive Office of Environmental Affairs 251 Causeway Street, Suite 900, Boston MA 02114 (617) 626-1020. **MassDEP cannot begin technical review of the application until the MEPA process has been completed, unless otherwise agreed to in writing.** Copies of MEPA filings (with reference to any applicable Transmittal numbers) should be sent to the appropriate program offices in Boston and the MEPA Coordinator in the appropriate Regional Office.

**Note:** These additional requirements are intended to serve as a guide to the applicant. It does not necessarily include **all** additional requirements.

## 4. What is the application fee?

The application fee is \$970.

## 5. What is the Primary Permit Location?

PRIMARY PERMIT LOCATION:

Department of Environmental Protection  
\* Regional Office

Water Supply

\* Find your region: <https://www.mass.gov/service-details/massdep-regional-offices-by-community>

## What is the Reserve Copy Location?

RESERVE COPY LOCATION:

None Required.

## 6. Where can I get a copy of the timelines?

The timelines are available on the MassDEP Website: <https://www.mass.gov/lists/massdep-fees-timelines>



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**7. What is the annual compliance fee?**

There is no annual compliance fee for this approval.

**8. How long is this approval in effect?**

The approval to conduct a pumping test on an existing source is valid for 2 years.

**9. How can I avoid the most common mistakes made in applying for this approval?**

- a. Be sure all items on the Application Completeness Checklist are completed and included in submitted application.
- b. Review the Division of Water Supply's *Guidelines and Policies for Public Water Systems* regarding what technical criteria are necessary to generate an approvable conceptual Zone II.
- c. Communicate with MassDEP concerning the materials necessary for an approvable submission.
- d. Submit application package along with the *one* copy of the MassDEP Transmittal Form to Water Supply at the appropriate MassDEP Regional Office
- e. Submit fee and *one* copy of the MassDEP Transmittal Form to: Department of Environmental Protection, P. O. Box 4062, Boston, MA 02211.

**10. What are the regulations that apply to this approval?**

**Where can I get copies?**

These regulations include, but are not limited to:

- a. Drinking Water Regulations, 310 CMR 22.00.
- b. Timely Action and Fee Provisions, 310 CMR 4.00.
- c. Administrative Penalty Regulations, 310 CMR 5.00.

These may be purchased at:

**State House Bookstore**  
**Room 116**  
**Boston, MA 02133**  
**617-727-2834**

**State House West Bookstore**  
**436 Dwight Street**  
**Springfield, MA 01103**  
**413-784-1376**



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**Application Completeness Checklist**

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- The MassDEP Transmittal Form is completed: <https://www.mass.gov/service-details/transmittal-form-number-for-massdep-permit-application-payment>
- Application Form BRP WS Application has been completed.

The application package includes:

- a map of the preliminary conceptual Zone II based on surficial geologic mapping and use of simple analytical equations.
- all existing pumping test data or subsurface data generated during geologic/hydrogeologic studies that might better define the regional hydrology.
- pumping test design proposal and monitoring well plan drafted in accordance with the Division of Water Supply's *Guidelines and Policies for Public Water Systems*.
- description and discussion of how pumping test and drawdown data will be used to delineate the Zone II.

To submit the application package:

- Checklist items have been completed.
- Send one copy of the application along with the *one* page from the MassDEP Transmittal Form to:

Department of Environmental Protection  
\_\_\_\_\_ \* Regional Office

Water Supply

\*Find your region: <https://www.mass.gov/service-details/massdep-regional-offices-by-community>

- Send fee of \$970 in the form of check or money order made payable to *Commonwealth of Massachusetts*, along with one copy from the MassDEP Transmittal Form to:

Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211